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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,947	03/25/2004	Takeshi Ohashi	450100-04973	6345

7590 12/01/2005

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EXAMINER

SUN, XIUQIN

ART UNIT	PAPER NUMBER
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2863

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary

Application No.

10/808,947

Applicant(s)

OHASHI ET AL.

Examiner

Xiuqin Sun

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 9-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. A response on 10/12/2005 a provisional election was made without traverse to prosecute the invention of claims 1-8. Claims 9-15 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, features, such as "an indicator disposed on said surface portion" in claims 1-3, "a folding structure" in claim 4, "a template" in claim 5, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for

consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 5, 6 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Song et al. (U.S. Pat. No. 6841963, hereafter referred to as Song-I).

With respect to claim 1:

Song-I discloses a diagnosing device for a stereo camera (13) mounted on a robot (10), said device comprising: a flat surface portion on which texture for stereo camera diagnosis is provided (col. 4, lines 21-24; cols. 4-5, lines 60-6); and an indicator

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disposed on said surface portion for indicating the positional relation between said robot and said surface portion (cols. 4-5, lines 60-19; col. 7, lines 24-31 and lines 39-67).

With respect to claims 2, 3, 5, 6 and 8:

Song-I further teaches: said robot includes a ground-contact portion for contact with a floor face (col. 5, lines 23-37); and wherein said indicator indicates a place on said surface portion where said ground-contact portion of said robot is placed (col. 4, lines 3-24; col. 8, lines 12-23); said robot includes one or more mobile legs including a foot (col. 1, lines 49-51; col. 5, lines 23-37); and wherein said indicator indicates a place on said surface portion where the soles of feet of said robot are placed (col. 4, lines 3-24; col. 8, lines 12-23); said surface portion includes texture within a template, which can correctly perform matching on an epipolar line in the event of a stereo camera system using template matching (Figs. 6a-6d; cols. 4-5, lines 60-19); said surface portion includes texture which allows avoiding mismatching in diagnosis and calibration (Figs. 6a-6d); said surface portion includes calibration patterns of which geometrical shape is known (col. 6, lines 59-67).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claim 4 is are rejected under 35 U.S.C. 103(a) as being unpatentable over Song et al. in view of Song et al. (U. S. Pub. No. 20040119487, hereafter referred to as Song-II).

Song-I discloses the device that includes the subject matter discussed above except a folding structure, which becomes a flat shape exposing said surface portion at the time of unfolding said folding structure.

Song-II discloses an automatic equipment, including a folding structure that becomes a flat shape exposing a surface portion, on which the automatic equipment is disposed, at the time of unfolding said folding structure (sections 0020 and 0036-0040).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Song-II into the invention of Song-I in order to provide a flexible calibration marker for calibrating the automatic equipment (Song-II, section 0036).

7. Claim 7 is are rejected under 35 U.S.C. 103(a) as being unpatentable over Song et al. in view of Peless et al. (U. S. Pat. No. 6850024).

Song-I discloses the device that includes the subject matter discussed above except said surface portion has patterns shaded in uniform texture.

Peless et al. disclose a robot, including a surface portion having patterns shaded in uniform texture (col. 6, lines 18-29; col. 7, lines 45-55).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Peless et al. into the invention of

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Song-I in order to provide markers that can be used to increase the precision of the calibration of the robot system (Peless et al., col. 7, lines 45-55).

Prior Art Citations

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) Gutmann et al. (U. S. Pub. No. 20040249504) is entitled "Robot self-position identification system and self-position identification method".

2) Li et al. (U. S. Pat. No. 5684531) is entitled "Ranging apparatus and method implementing stereo vision system".

3) Nakakita et al. (U. S. Pub. No. 20030130851) is entitled "Legged robot, legged robot behavior control method, and storage medium".

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuqin Sun whose telephone number is (571)272-2280.

The examiner can normally be reached on 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571)272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

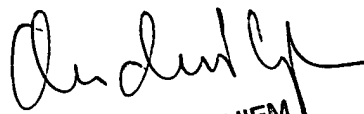
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Xiuqin Sun
Examiner
Art Unit 2863

XS

November 28, 2005


MICHAEL NGHIEM
PRIMARY EXAMINER